

Abstract:

In a method of fabricating a semiconductor device having a MISFET of trench gate structure, a trench is formed from a major surface of a semiconductor layer of first conductivity type which serves as a drain region, in a depth direction of the semiconductor layer, a gate insulating film including a thermal oxide film and a deposited film is formed over the internal surface of the trench, and after a gate electrode has been formed in the trench, impurities are introduced into the semiconductor substrate of first conductivity type to form a semiconductor region of second conductivity type which serves as a channel forming region, and impurities are introduced into the semiconductor region of second conductivity type to form the semiconductor region of first conductivity type which serves as a source region.